

INTERNATIONAL SEARCH REPORT

International application No.

PCT AJS04/30032

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) A61K 39/385, 39/116, 39/00, 39/02, 39/38, 39/09
US CL : 424/197.11, 203.1, 192.1, 190.1, 184.1, 244.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

US : 424/197.11, 203.1, 192.1, 190.1, 184.1, 244.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/041 157 A2 (CHIRON CORPORATION) 21 May 2004 (21.05.2004), claims, and pages 4 and 5.	1-17

☐ Further documents are listed in the continuation of Box C.

D

See patent family annex.

* Special categories of cited documents	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

09 November 2005 (09.11.2005)

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
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Date of mailing of the international search report

06 DEC 2005

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Box No. π	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons	
1 <input checked="" type="checkbox"/>	Claims Nos because they relate to subject matter not required to be searched by this Authority, namely
2 <input type="checkbox"/>	Claims Nos because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically
3 <input type="checkbox"/>	Claims Nos because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)
Box No. τϱ	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows Please See Continuation Sheet	
1 <input type="checkbox"/>	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2 <input type="checkbox"/>	As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees
3 <input type="checkbox"/>	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos
4 <input checked="" type="checkbox"/>	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claims Nos 1-17
Remark on Protest <input type="checkbox"/>	The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee
<input type="checkbox"/>	The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation
<input type="checkbox"/>	No protest accompanied the payment of additional search fees

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BOX III OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-17, drawn to a composition comprising a combination of two or more GBS antigens comprising GBS 80 or a fragment thereof.

Group II, claim(s) 18, drawn to a method for the therapeutic or prophylactic treatment of GBS infection by administering the composition of invention I.

Group III, claim(s) 19-21, drawn to a method for the manufacture of a medicament by combining a GBS 80 antigen fragment thereof with at least one GBS polypeptide antigen.

The inventions listed as Groups III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Inventions I-III lack unity. The special technical feature of invention I is a composition comprising a combination of two or more GBS antigens comprising GBS 80 or a fragment thereof. However, such a composition was already disclosed in the prior art. For instance, CHIRON CORPORATION (WO 2004/041 157 A2) disclosed a composition comprising a combination of GBS 80 having the amino acid sequence of SEQ ID NO 2 and GBS 322 antigen. Thus, the product of invention I does not define over the prior art. Although the product of invention I and the method of using the product of invention II and a method of making the product of invention III is a permitted combination under PCT Rule 13.2, in the instant case, since the product of invention I is already disclosed in the art, the special technical feature is not a unifying feature. Technically, the absence of special technical feature permits the separation of the method of using the product or the method of making the product from the product itself.

Continuation of B. FIELDS SEARCHED Item 3

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PCT/USQ4/30032

DIALOG, WEST, MEDLINE, BIOSIS, EMBASE, Sequence databases
GBS 80, SEQ ID NO: 2, inventors' names